

T25 South Validated Sediment Results

								Location ID Sample ID	T25-SC02 T25-SC02-4.6-5.6	T25-SC03 T25-SC03-3.7-4.7	T25-SC03 T25-SC03-5.7-6.2	T25-SC04 T25-SC04-4-5	T25-SC04 T25-SC04-5-6	T25-SC-05 T25-SC05-0-1	T25-SC-05 T25-SC05-1-2
							Sample Date	3/25/2019	3/24/2019	3/24/2019	3/24/2019	3/24/2019	3/26/2019	3/26/2019	
							Depth	4.6 - 5.6 ft	3.7 - 4.7 ft	5.7 - 6.2 ft	4 - 5 ft	5 - 6 ft	0 - 1 ft	1 - 2 ft	
							Sample Type	N	N	N	N	N	N	N	
							Matrix	SE	SE	SE	SE	SE	SE	SE	
				X	1267668.28	Y		212812.47	1267650.75	212756.49	1267597.9	212603.43	1267419.4	212412.09	
Conventional Parameters (ppt)															
Total organic carbon	SW9060A	--	--	--	--	--		0.66 J	0.58 J	0.20 J	1.84	3.97 J	1.52	1.80 J	
Total Solids	SM2540G	--	--	--	--	--		74.94	72.82	78.74	69.91	63.22	61.65	64.91	
Metals (mg/kg)															
Arsenic	SW6020A	57	93	57	93	--		3.28	12.4	4.59	5.45	--	8.04	--	
Cadmium	SW6020A	5.1	6.7	5.1	6.7	--		0.29	0.38	0.11 J	0.5	--	0.49	--	
Chromium	SW6020A	260	270	260	270	--		10.4	24 J	13.6	21.4 J	--	20.9 J	--	
Copper	SW6020A	390	390	390	390	--		20.3	65.5 J	20.5	44.2	--	43.7	--	
Lead	SW6020A	450	530	450	530	--		42.6 J	84.8	35.2	91.4	--	37.9	--	
Mercury	SW7471B	0.41	0.59	0.41	0.59	--		0.205	0.0791 J	0.0165 J	0.627	0.154 J	0.134	--	
Silver	SW6020A	6.1	6.1	6.1	6.1	--		0.14 J	0.3	0.1 J	0.4	--	0.38	--	
Zinc	SW6020A	410	960	410	960	--		44.8 J	237 J	53.6	142	--	88.9	--	
Semivolatile Organics (mg/kg-OC)															
1,2,4-Trichlorobenzene	SW8270DSIM	0.81	1.8	--	--	--		0.74 U	0.86 U	1.4 J	0.962 J	0.21 J	0.28 J	--	
1,2-Dichlorobenzene	SW8270DSIM	2.3	2.3	--	--	--		0.74 U	0.86 U	2.4 U	0.52 U	0.13 U	0.33 U	--	
1,4-Dichlorobenzene	SW8270DSIM	3.1	9	--	--	--		0.74 U	0.86 U	2.4 U	0.32 J	0.285 J	1 J	--	
2,4-Dimethylphenol	SW8270DSIM	--	--	--	--	--		0.82 J	6.1 J	2.3 J	0.45 J	0.277 J	0.49 J	--	
2-Methylphenol (o-Cresol)	SW8270DSIM	--	--	--	--	--		0.64 J	3.7 J	2.4 U	0.36 J	0.23 J	0.53 J	--	
4-Methylphenol (p-Cresol)	SW8270DSIM	--	--	--	--	--		1.8	10 J	2.4 J	1.34 J	1.9 J	9.47 J	--	
Benzoic acid	SW8270DSIM	--	--	--	--	--		15 U	15 J	-- R	-- R	2.5 UJ	8.6 J	--	
Benzyl alcohol	SW8270DSIM	--	--	--	--	--		3.0 U	3.4 U	2.3 J	2.07 U	0.499 U	1.31 U	--	
bis(2-Ethylhexyl)phthalate	SW8270D	47	78	--	--	--		7.5 U	24 J	29	10	1.25 U	20.7	--	
Butylbenzyl phthalate	SW8270D	4.9	64	--	--	--		3.0 U	3.4 U	9.7 UJ	2.07 UJ	0.499 U	1.31 UJ	--	
Diethyl phthalate	SW8270DSIM	61	110	--	--	--		3.0 U	3.4 UJ	9.7 UJ	2.07 UJ	0.577 UJ	1.31 UJ	--	
Dimethyl phthalate	SW8270DSIM	53	53	--	--	--		0.74 U	0.86 U	2.4 UJ	0.52 UJ	0.13 U	0.33 UJ	--	
Di-n-butyl phthalate	SW8270D	220	1700	--	--	--		9.9 U	3.4 U	9.7 U	2.07 U	0.499 U	0.776 J	--	
Di-n-octyl phthalate	SW8270D	58	4500	--	--	--		3.0 U	3.4 U	9.7 U	2.07 U	0.499 U	1.31 U	--	
Hexachlorobenzene	SW8270DSIM	0.38	2.3	--	--	--		0.74 U	0.86 U	2.4 U	0.52 U	0.13 U	0.33 U	--	
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270DSIM	3.9	6.2	--	--	--		0.74 U	0.86 U	2.4 U	0.52 U	0.13 U	0.33 U	--	
n-Nitrosodiphenylamine	SW8270DSIM	11	11	--	--	--		0.74 U	0.86 U	2.4 U	0.52 U	0.13 U	0.33 U	--	
Pentachlorophenol	SW8270DSIM	--	--	--	--	--		3.0 U	0.72 J	9.7 U	2.07 U	0.36 J	0.43 J	--	
Phenol	SW8270DSIM	--	--	--	--	--		1.2	9.3 J	5.8 J	2.36 J	0.635 J	15.9 J	--	
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)															
2-Methylnaphthalene	SW8270D	38	64	--	--	--		8.3	200 J	9.7 J	4.12	8.11	2.35	--	
Acenaphthene	SW8270D	16	57	--	--	--		19	460	26	5.18	20.1	2.99	--	
Acenaphthylene	SW8270D	66	66	--	--	--		6.0	3.4 U	9.0 J	3.55	0.499 U	4.63	--	
Anthracene	SW8270D	220	1200	--	--	--		22	780	58	14.6	43	13.3	--	
Benzo(a)anthracene	SW8270D	110	270	--	--	--		22	1100	80	30	69.3	14.7	--	
Benzo(a)pyrene	SW8270D	99	210	--	--	--		28	1200	90	32.9	74.8	25.6	--	
Benzo(b,j,k)fluoranthenes	SW8270D	--	--	--	--	--		56	1800	170	67.4	116	62.9	--	
Benzo(g,h,i)perylene	SW8270D	31	78	--	--	--		17	860	62	19.7	23.3	10.8	--	
Chrysene	SW8270D	110	460	--	--	--		38	1200	140	41.1	78	33.9	--	
Dibenzo(a,h)anthracene	SW8270DSIM	12	33	--	--	--		5.7	190 J	15 J	5.76 J	9.6 J	4.1 J	--	

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T25-SC-06 T25-SC06-0-1 3/26/2019 0 - 1 ft N SE 1267525.53 212519.45	T25-SC-06 T25-SC06-1.5-2.5 3/26/2019 1.5 - 2.5 ft N SE 1267525.53 212519.45	T25-SC07 T25-SC07-0-1 3/25/2019 0 - 1 ft N SE 1267571.79 212704.13	T25-SC07 T25-SC57-0-1 3/25/2019 0 - 1 ft FD SE 1267571.79 212704.13	T25-SC07-5-6 3/25/2019 5 - 6 ft N SE 1267571.79 212704.13	T25-SC08 T25-SC08-0-1 3/25/2019 0 - 1 ft N SE 1267624.89 212881.97	T25-SC08-7-8 3/25/2019 7 - 8 ft N SE 1267624.89 212881.97	T25-SC-09B T25-SC09B-0-1 3/26/2019 0 - 1 ft N SE 1267749.02 212873.88	T25-SC-09B T25-SC09B-2-3 3/26/2019 2 - 3 ft N SE 1267749.02 212873.88
1.13	22.30 J	1.34 J	1.75 J	14.70 J	1.09 J	10.20 J	21.80	6.29 J
70.08	29.45	48.94	48.66	33.33	42.00	44.16	24.26	43.22
5.8	--	21.4	16.7	--	13.2	--	11.9	--
0.32	--	0.99	1.02	--	0.65	--	3.77	--
22.3	--	39.3	40.4	--	28.9	--	36.7	--
27.5	--	110	98.8	--	71.2	--	105	--
27.3	--	84 J	71.8 J	--	52.3 J	--	391	--
0.0815	--	0.322	0.351	--	0.235	--	1.42	2.35 J
0.21 J	--	0.91 J	0.87 J	--	0.55 J	--	1.73	--
71.8	--	185	181 J	--	135 J	--	300	--
0.32 J	0.85 J	0.31 J	--	--	0.27 J	0.048 U	0.023 U	0.078 U
0.43 U	0.0987 U	0.37 U	--	--	0.45 U	0.048 U	0.023 U	0.078 U
8.79	10 J	2.2	--	--	1.89	0.174	0.022 J	0.496
0.50 J	0.103 J	0.828 J	--	--	1.19 J	0.746	0.0725 J	0.315 U
0.37 J	0.0951 J	0.72	--	--	0.87	0.276	0.023 U	0.078 U
2.06	0.67 J	2.67	--	--	3.03	5.61	1.42	9.03
8.75 U	1.26 J	3.13 J	--	--	3.3 J	1.49 J	0.456 U	1.57 UJ
0.82 J	0.396 U	2.71	--	--	2.96	0.194 U	0.0693 J	0.315 U
37.3	0.99 U	34.8	--	--	45	0.485 U	0.228 U	0.787 U
1.14 J	0.396 U	1.98	--	--	1.82 U	0.194 U	0.0913 U	0.315 U
1.75 U	0.387 J	1.47 U	--	--	1.82 U	0.194 U	0.0913 U	0.315 U
0.43 U	0.0987 U	0.64	--	--	0.34 J	0.048 U	0.023 U	0.078 U
4.15 U	0.396 U	3.95 U	--	--	6.47 U	0.194 U	0.0839 U	0.315 U
1.75 U	0.396 U	1.47 U	--	--	1.82 U	0.194 U	0.0913 U	0.315 U
0.43 U	0.0987 U	0.37 U	--	--	0.45 U	0.048 U	0.023 U	0.078 U
0.43 U	0.0987 U	0.37 U	--	--	0.45 U	0.048 U	0.023 U	0.078 U
0.43 U	0.0987 U	0.836	--	--	0.45 U	0.048 U	0.023 U	0.078 U
0.76 J	0.335 J	1.58	--	--	0.88 J	0.154 J	0.0913 U	0.315 UJ
1.39	0.91 J	2.25	--	--	2.22	0.99	0.706	1.36
2.5	0.668	2.9	--	--	4.61	23.4	0.72	11.7
4.45	1.5	2.66	--	--	7.23	84.5	6.79	33.7
8.94	0.396 U	12.5	--	--	26	3.83	0.592	6.0
33.3	2.89	29.6	--	--	60.8	63.2	8.67	77.6
48.2	4.03	49	--	--	96.3	59.3	6.97	80.8
64	6.1	80.6	--	--	--	28.8	4.3	33.1
144	15.4	187	--	--	--	64.9	8.85	68.2
20.3	1.5	20.4	--	--	100 J	3.15	1.0	2.88
119	5.29	109	--	--	--	79	--	100
9.03	0.722 J	10.7	--	--	39.4	0.848 J	0.5	0.712 J

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Dibenzofuran	SW8270D	15	58	--	--	--	7.4	290 J	15	4.57	10.4	2.7	--
Fluoranthene	SW8270D	160	1200	--	--	--	54	3900 J	410 J	101 J	220 J	26.6 J	--
Fluorene	SW8270D	23	79	--	--	--	8.7	500 J	42 J	9.18 J	17.2	5.74 J	--
Indeno(1,2,3-c,d)pyrene	SW8270D	34	88	--	--	--	15	660	51	16.9	22.2	11	--
Naphthalene	SW8270D	99	170	--	--	--	29	500	37	7.55	18.6	7.96	--
Phenanthrene	SW8270D	100	480	--	--	--	38	4500	230	51.2	179	13.2	--
Pyrene	SW8270D	1000	1400	--	--	--	190	3800 J	420 J	132 J	237 J	34.5 J	--
Total Benzofluoranthenes (b,j,k) (U = 0)	--	230	450	--	--	--	56	1800	170	67.4	116	62.9	--
Total HPAH (SMS) (U = 0)	--	960	5300	--	--	--	430	15000 J	1400 J	400 J	850 J	220 J	--
Total LPAH (SMS) (U = 0)	--	370	780	--	--	--	120	6700 J	400 J	91.3 J	280	47.8 J	--
Semivolatile Organics (µg/kg)													
1,2,4-Trichlorobenzene	SW8270DSIM	--	--	31	51	--	4.9 U	5 U	2.7 J	17.7 J	8.2 J	4.3 J	--
1,2-Dichlorobenzene	SW8270DSIM	--	--	35	50	--	4.9 U	5 U	4.8 U	9.5 U	5 U	5 U	--
1,4-Dichlorobenzene	SW8270DSIM	--	--	110	110	--	4.9 U	5 U	4.8 U	5.8 J	11.3 J	15.2 J	--
2,4-Dimethylphenol	SW8270DSIM	29	29	29	29	--	5.4 J	35.1 J	4.5 J	8.3 J	11 J	7.4 J	--
2-Methylphenol (o-Cresol)	SW8270DSIM	63	63	63	63	--	4.2 J	21.4 J	4.8 U	6.7 J	9 J	8.1 J	--
4-Methylphenol (p-Cresol)	SW8270DSIM	670	670	670	670	--	12.1	60.8 J	4.8 J	24.7 J	75.4 J	144 J	--
Benzoic acid	SW8270DSIM	650	650	650	650	--	99 U	85.1 J	-- R	-- R	99.1 UJ	130 J	--
Benzyl alcohol	SW8270DSIM	57	73	57	73	--	19.8 U	19.9 U	4.5 J	38.1 U	19.8 U	19.9 U	--
bis(2-Ethylhexyl)phthalate	SW8270D	--	--	1300	1900	--	49.5 U	137 J	58.9	184	49.6 U	314	--
Butylbenzyl phthalate	SW8270D	--	--	63	900	--	19.8 U	19.9 U	19.4 UJ	38.1 UJ	19.8 U	19.9 UJ	--
Diethyl phthalate	SW8270DSIM	--	--	200	1200	--	19.8 U	19.9 UJ	19.4 UJ	38.1 UJ	22.9 UJ	19.9 UJ	--
Dimethyl phthalate	SW8270DSIM	--	--	71	160	--	4.9 U	5 U	4.8 UJ	9.5 UJ	5 U	5 UJ	--
Di-n-butyl phthalate	SW8270D	--	--	1400	1400	--	65.6 U	19.9 U	19.4 U	38.1 U	19.8 U	11.8 J	--
Di-n-octyl phthalate	SW8270D	--	--	6200	6200	--	19.8 U	19.9 U	19.4 U	38.1 U	19.8 U	19.9 U	--
Hexachlorobenzene	SW8270DSIM	--	--	22	70	--	4.9 U	5 U	4.8 U	9.5 U	5 U	5 U	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270DSIM	--	--	11	120	--	4.9 U	5 U	4.8 U	9.5 U	5 U	5 U	--
n-Nitrosodiphenylamine	SW8270DSIM	--	--	28	40	--	4.9 U	5 U	4.8 U	9.5 U	5 U	5 U	--
Pentachlorophenol	SW8270DSIM	360	690	360	690	--	19.8 U	4.2 J	19.4 U	38.1 U	14.3 J	6.5 J	--
Phenol	SW8270DSIM	420	1200	420	1200	--	8.2	53.9 J	11.5 J	43.4 J	25.2 J	242 J	--
Polycyclic Aromatic Hydrocarbons (µg/kg)													
2-Methylnaphthalene	SW8270D	--	--	670	670	--	54.7	1160 J	19.3 J	75.8	322	35.7	--
Acenaphthene	SW8270D	--	--	500	500	--	124	2680	52.5	95.4	796	45.4	--
Acenaphthylene	SW8270D	--	--	1300	1300	--	39.3	19.9 U	18 J	65.4	19.8 U	70.4	--
Anthracene	SW8270D	--	--	960	960	--	146	4520	115	269	1700	202	--
Benzo(a)anthracene	SW8270D	--	--	1300	1600	--	144	6650	160	600	2750	223	--
Benzo(a)pyrene	SW8270D	--	--	1600	1600	--	184	7210	180	605	2970	389	--
Benzo(b,j,k)fluoranthenes	SW8270D	--	--	--	--	--	371	10700	334	1240	4610	956	--
Benzo(g,h,i)perylene	SW8270D	--	--	670	720	--	109	4990	123	362	924	164	--
Chrysene	SW8270D	--	--	1400	2800	--	248	6990	275	756	3100	515	--
Dibenzo(a,h)anthracene	SW8270DSIM	--	--	230	230	--	37.9	1120 J	29 J	106 J	380 J	62.3 J	--
Dibenzofuran	SW8270D	--	--	540	540	--	49.1	1660 J	29.5	84	411	41.1	--
Fluoranthene	SW8270D	--	--	1700	2500	--	357	22700 J	817 J	1850 J	8730 J	404 J	--
Fluorene	SW8270D	--	--	540	540	--	57.1	2900 J	84.5 J	169 J	683	87.3 J	--
Indeno(1,2,3-c,d)pyrene	SW8270D	--	--	600	690	--	98.9	3840	101	311	882	170	--
Naphthalene	SW8270D	--	--	2100	2100	--	192	2880	74.9	139	738	121	--
Phenanthrene	SW8270D	--	--	1500	1500	--	249	25900	455	942	7110	201	--
Pyrene	SW8270D	--	--	2600	3300	--	1280	22100 J	835 J	2420 J	9390 J	524 J	--
Total Benzofluoranthenes (b,j,k) (U = 0)	--	--	--	3200	3600	--	371	10700	334	1240	4610	956	--
Total HPAH (SMS) (U = 0)	--	--	--	12000	17000	--	2830	86300 J	2900 J	8300 J	34000 J	3400 J	--
Total LPAH (SMS) (U = 0)	--	--	--	5200	5200	--	807	39000 J	800 J	1680 J	11000	727 J	--
PCB Aroclors (mg/kg-OC)													
Total PCB Aroclors (SMS Marine 2013) (U = 0)	--	12	65	--	--	--	0.59 U	48	57	66.5	11	17	22.7

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4.13	1.77	2.6	--	--	9.72	28.3	3.0	12.8
118	9.6	103	--	--	--	332	--	456 J
1.75 U	1.19	5.61	--	--	14.8	53	5.18	31.5
21.5	1.73	23.7	--	--	108	3.37	1.07	2.97
6.59	2.68	4.81	--	--	7.57	432	1.8	56.9
36.1	3.13	40	--	--	--	66.3	--	73
138	25.5 J	221	--	--	815	213 J	26.7	277 J
144	15.4	187	--	--	--	64.9	8.85	68.2
680	69.9 J	805	--	--	1200 J	780 J	50	1000 J
89.4	11.4	90	--	--	120	700	23	300
3.6 J	190 J	4.1 J	--	--	2.9 J	4.9 U	5 U	4.9 U
4.9 U	22 U	4.9 U	--	--	4.9 U	4.9 U	5 U	4.9 U
99.3	2300 J	29.5	--	--	20.6	17.7	4.7 J	31.2
5.7 J	22.9 J	11.1 J	--	--	13 J	76.1	15.8 J	19.8 U
4.2 J	21.2 J	9.6	--	--	9.5	28.2	5 U	4.9 U
23.3	150 J	35.8	--	--	33	572	309	568
98.9 U	281 J	42 J	--	--	36 J	152 J	99.4 U	99 UJ
9.3 J	88.2 U	36.3	--	--	32.3	19.8 U	15.1 J	19.8 U
421	220 U	466	--	--	490	49.5 U	49.7 U	49.5 U
12.9 J	88.2 U	26.5	--	--	19.8 U	19.8 U	19.9 U	19.8 U
19.8 U	86.4 J	19.7 U	--	--	19.8 U	19.8 U	19.9 U	19.8 U
4.9 U	22 U	8.6	--	--	3.7 J	4.9 U	5 U	4.9 U
46.9 U	88.2 U	52.9 U	--	--	70.5 U	19.8 U	18.3 U	19.8 U
19.8 U	88.2 U	19.7 U	--	--	19.8 U	19.8 U	19.9 U	19.8 U
4.9 U	22 U	4.9 U	--	--	4.9 U	4.9 U	5 U	4.9 U
4.9 U	22 U	4.9 U	--	--	4.9 U	4.9 U	5 U	4.9 U
4.9 U	22 U	11.2	--	--	4.9 U	4.9 U	5 U	4.9 U
8.6 J	74.6 J	21.2	--	--	9.6 J	15.7 J	19.9 U	19.8 UJ
15.7	203 J	30.2	--	--	24.2	101	154	85.5
28.2	149	38.8	--	--	50.2	2390	157	735
50.3	334	35.6	--	--	78.8	8620	1480	2120
101	88.2 U	168	--	--	280	391	129	400
376	644	397	--	--	663	6450	1890	4880
545	899	656	--	--	1050	6050	1520	5080
720	1360	1080	--	--	--	2940	930	2080
1630	3440	2510	--	--	--	6620	1930	4290
229	334	274	--	--	1100 J	321	220	181
1340	1180	1460	--	--	--	8100	--	6500
102	161 J	143	--	--	429	86.5 J	100	44.8 J
46.7	395	34.8	--	--	106	2890	660	805
1330	2140	1380	--	--	--	33900	--	28700 J
19.8 U	265	75.2	--	--	161	5400	1130	1980
243	385	318	--	--	1180	344	234	187
74.5	597	64.4	--	--	82.5	44100	392	3580
408	697	500	--	--	--	6760	--	4590
1560	5680 J	2960	--	--	8880	21700 J	5830	17400 J
1630	3440	2510	--	--	--	6620	1930	4290
7700	15600 J	10800	--	--	13000 J	80000 J	11000	64000 J
1010	2540	1200	--	--	1300	72000	5020	18000
47.6 J	56	55 J	--	100	35 J	3.44	0.57 J	--

T25 South Validated Sediment Results

PCB Aroclors ($\mu\text{g}/\text{kg}$)														
Aroclor 1016	SW8082A	--	--	--	--	--	3.9 U	4 U	4 U	39.7 U	4 U	4 U	40 U	
Aroclor 1221	SW8082A	--	--	--	--	--	3.9 U	4 U	4 U	39.7 U	4 U	4 U	40 U	
Aroclor 1232	SW8082A	--	--	--	--	--	3.9 U	4 U	4 U	39.7 U	4 U	4 U	40 U	
Aroclor 1242	SW8082A	--	--	--	--	--	3.9 U	4 U	4 U	39.7 U	4 U	4 U	40 U	
Aroclor 1248	SW8082A	--	--	--	--	--	3.9 U	32.9	12.9	39.7 U	44.5	32.4	52.8	
Aroclor 1254	SW8082A	--	--	--	--	--	3.9 U	98.7	50.5	541	107	92.7	99.8	
Aroclor 1260	SW8082A	--	--	--	--	--	3.9 U	148	50.6	682	304	134	256	
Aroclor 1262	SW8082A	--	--	--	--	--	3.9 U	4 U	4 U	39.7 U	4 U	4 U	40 U	
Aroclor 1268	SW8082A	--	--	--	--	--	3.9 U	4 U	4 U	39.7 U	4 U	4 U	40 U	
Total PCB Aroclors (SMS Marine 2013) (U = 0)		--	--	130	1000	--	3.9 U	280	110	1220	460	260	409	
Dioxin Furans (ng/kg)														
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B	--	--	--	--	--	0.235 UJ	0.903 U	0.195 J	1.96 J	1.05 U	0.396 J	--	
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B	--	--	--	--	--	0.298 J	1.24 U	0.658 J	20.3	13 J	1.82	--	
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	--	0.103 U	1.61 J	0.543 J	17.1	7.08 J	2.2	--	
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	--	0.325 J	10.9 J	3.89	108	60.7 J	10.6	--	
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	--	0.224 J	5.37 J	1.93	27.4	24 J	5.23	--	
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B	--	--	--	--	--	6.64	222 J	105	1130	920	319	--	
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B	--	--	--	--	--	50.1	1730	956	6110 J	5300	2930	--	
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B	--	--	--	--	--	0.732 J	2.35 J	0.526 J	7.09 J	9.53 J	1.4	--	
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	--	0.411 J	1.69 J	0.504 J	5.96 J	5.67 J	1.12	--	
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	--	0.487 J	2.06 J	0.74 J	9.78 J	7.63 J	1.78	--	
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	--	0.338 J	6.98 J	2.08	35.2	23.5 J	5.15	--	
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	--	0.294 J	3.73 J	0.804 J	17.5	15.1 J	1.88	--	
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	--	0.243 U	1.88 J	0.873 J	15.3	10.5 J	1.24 J	--	
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	--	0.379 J	1.5 J	0.461 J	10.8	23.1 J	1.45	--	
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	--	3.35	57.7 J	24.8	321	714	58	--	
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	--	0.081 U	5.29 J	1.58	28.5	26.8 J	3.81	--	
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B	--	--	--	--	--	14.8	266	121	1220	3680	194	--	
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B	--	--	--	--	--	4.44 J	3.48 J	3.28 J	704 J	133	10.3 J	--	
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B	--	--	--	--	--	2.75	12	5.6	442	154	12.4	--	
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	--	4.74	78.4	36.2	1230	508	102	--	
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B	--	--	--	--	--	15.8	556	308	2510	1860	870	--	
Total Tetrachlorodibenzofuran (TCDF)	E1613B	--	--	--	--	--	17.9	28.4	16.8	273	197	41.6	--	
Total Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	--	5.86	41.9	11.3	269	380	35.8	--	
Total Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	--	4.76	107	34.6 J	672	532	90 J	--	
Total Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	--	11.5	262	103	1230	2660	199	--	
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2)		--	--	--	--	--	25	0.94 J	8.62 J	3.84 J	66.2 J	53 J	10.4 J	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0)		--	--	--	--	--	25	0.8 J	7.55 J	3.84 J	66.2 J	52 J	10.4 J	--

Notes:

TOC in range (0.5% - 3.5%)

Detected concentration is greater than SMS_Marine SCO_SCUMII screening level

Detected concentration is greater than SMS_Marine CSL_SCUMII screening level

TOC out of range

Detected concentration is greater than AET_Marine SCO_SCUMII screening level

Detected concentration is greater than AET_Marine CSL_SCUMII screening level

East Waterway Criteria

DF TEQ above the East Waterway Remedial Action Level (EWW RAL).

Bold: Detected result

--: results not reported or not applicable

DF: dioxin furans

FD: field duplicate sample

ft: feet

T25 South Validated Sediment Results

39.6 U	566 U	7.8 U	--	1000 U	7.9 U	14.8 U	7.9 U	--
39.6 U	566 U	7.8 U	--	1000 U	7.9 U	14.8 U	7.9 U	--
39.6 U	566 U	7.8 U	--	1000 U	7.9 U	14.8 U	7.9 U	--
39.6 U	566 U	7.8 U	--	1000 U	7.9 U	14.8 U	7.9 U	--
84.1 J	566 U	79.7	--	1000 U	45.9 J	40.5	7.9 U	--
232 J	2600	270	--	3450	124 J	88.6	48.8 J	--
222 J	9890	389 J	--	13300	212 J	222	74.5 J	--
39.6 U	566 U	7.8 U	--	1000 U	7.9 U	14.8 U	7.9 U	--
39.6 U	566 U	7.8 U	--	1000 U	7.9 U	14.8 U	7.9 U	--
538 J	12000	740 J	--	17000	380 J	351	120 J	--
1.11 J	7.47 J	0.735 U	0.84 J	12.4 J	1.01 U	3.84 J	1.43 U	1.16 U
2.73	144	5.64 J	4.3	95.1 J	3.96 J	15.1 J	13	2.65
2.38 J	137	7.23 J	6.18	76.4 J	5.98 J	8.74 J	3.5 J	0.756 U
51.8 J	1500	38 J	35.9	1180 J	26.4	26.5 J	15.6	2.42 J
6.74	584	14.7 J	5	270 J	10.5	16.2 J	6.52	1.62
1650	16600	1470	1420	27000	1190	364	143	16.9
12200 J	93500 J	12700	13200	160000	12300	2090	941	77.4
1.81 J	1150 J	11.9 J	3.51	242 J	2.19 J	50.4 J	6.39	1.02 U
1.23	35.7 J	3.28 J	2.25	32.6 J	1.82 J	8.68 J	5.58	3.11 J
2.31	132	5.12 J	3.92	62.8 J	2.55 J	15.8 J	13.8	2.5
8.72 J	334	15.5 J	11.3	242 J	7.63 J	19 J	12.7	1.77
5.39 J	206	5.63 J	4.77	105 J	2.97 J	19.5 J	15.9	2.15
2.07 J	250 J	3.39 J	3.02 J	90.4 J	2.51 UJ	4.51 J	4.24	0.6 U
2.3 J	328	5.57 J	3.86	190 J	3.17 J	31.3 J	15	1.4 J
360	4470	169	151	8850	91.5	186	102	8.99
17.2 J	201	11.4 J	9.79	401 J	6.79 J	9.3 J	5.39 J	0.835 J
1510	10800	599	515	50500	334	641	439	26.2 J
276 J	734	31	22.3 J	385	6.81 J	173	122	45.7
43.2	1370	40.7	26	916	18.5	220	108	20.1
340 J	11000	467	455	5900	346	317	171	43.8
3500	33500	5190	5470	51500	4950	674	109	31.5
51.2	5820	90.9	60.1	2000	40	501	455	73.9
62.1	11100	101	59.1	3920	50.9 J	911	618	39.3
480 J	6590	252 J	273 J	7510	150 J	494	465	23.5
1380 J	13400	625	538	45200	340	646	292	21.9
37 J	890 J	38.3 J	33.7 J	790 J	28 J	48 J	28.9 J	5.43 J
37 J	890 J	38 J	33.7 J	790 J	27.3 J	48 J	28.2 J	4.73 J

T25 South Validated Sediment Results

HPAH: high molecular weight PAH
J: estimated value
LPAH: low molecular weight PAH
mg/kg: milligrams per kilogram
mg/kg-OC: milligrams per kilogram organic carbon normalized
N: normal environmental sample
ng/kg: nanograms per kilogram
PAH: polycyclic aromatic hydrocarbons
PCB: polychlorinated biphenyls
pct: percent
R: Rejected
SE: sediment matrix
TEQ: Toxic Equivalents Quotient
TOC: Total Organic Carbon
U: compound analyzed, but not detected above detection limit
µg/kg: micrograms per kilogram
UJ: compound analyzed, but not detected above estimated detection limit

Horizontal coordinate datum is NAD 1983 State Plane Washington North FIPS 4601 (US Survey Feet).

All nondetect results are reported at the reporting limit or, for dioxin/furan analysis, at the estimated detection limit (EDL).

Totals are calculated as the sum of all detected results ($U=0$). If all results are not detected, the highest limit value is reported as the sum.

Totals are calculated as the sum of all detected results and half of the reporting limit of nondetect results ($U=1/2$). If all results are not detected, the highest limit value is reported as the sum.

USEPA Stage 2B and 4 data validation was completed by Laboratory Data Consultants (LDC).

Total LPAH are the total of acenaphthene, acenaphthylene, anthracene, fluorene, naphthalene, and phenanthrene. 2-Methylnaphthalene is not included in the sum of LPAHs.

Total HPAH are the total of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-c,d)pyrene, and pyrene.

Total PCB Aroclors (SMS Marine 2013) does not include Aroclor 1262 and 1268.

Dioxin/furan TEQ values were calculated with 2005 World Health Organization (WHO) TEF values for mammals.

T25 South Validated Sediment Results

Notes:

TOC in range (0.5% - 3.5%)

TOC out of range

East Waterway Criteria

Bold: Detected result

--: results not reported or not applicable

DF: dioxin furans

FD: field duplicate sample

ft: feet

HPAH: high molecular weight PAH

J: estimated value

LPAH: low molecular weight PAH

mg/kg: milligrams per kilogram

mg/kg-OC: milligrams per kilogram organic carbon normalized

N: normal environmental sample

ng/kg: nanograms per kilogram

PAH: polycyclic aromatic hydrocarbons

PCB: polychlorinated biphenyls

pct: percent

R: Rejected

SE: sediment matrix

TEQ: Toxic Equivalents Quotient

TOC: Total Organic Carbon

U: compound analyzed, but not detected above detection limit

µg/kg: micrograms per kilogram

UJ: compound analyzed, but not detected above estimated detection limit

Horizontal coordinate datum is NAD 1983 State Plane Washington North FIPS 4601 (US Survey Feet).

All nondetect results are reported at the reporting limit or, for dioxin furan analysis, at the estimated detection limit (EDL).

Totals are calculated as the sum of all detected results (U=0). If all results are not detected, the highest limit value is reported as the sum.

Totals are calculated as the sum of all detected results and half of the reporting limit of nondetect results (U=1/2). If all results are not detected, the highest USEPA Stage 2B and 4 data validation was completed by Laboratory Data Consultants (LDC).

Total LPAH are the total of acenaphthene, acenaphthylene, anthracene, fluorene, naphthalene, and phenanthrene. 2-Methylnaphthalene is not included in the

Total HPAH are the total of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, chrysene, dibenzo(a,h)a

Total PCB Aroclors (SMS Marine 2013) does not include Aroclor 1262 and 1268.

Dioxin/furan TEQ values were calculated with 2005 World Health Organization (WHO) TEF values for mammals.

IDW Results

		Location ID Sample ID	T25-SC02 T25-SC02-0-4.6	T25-SC02 T25-SC52-0-4.6	T25-SC03 T25-SC-03-0-5.7	T25-SC04 T25-SC-04-0-4
		Sample Date	3/25/2019	3/25/2019	3/24/2019	3/24/2019
		Depth	0 - 4.6 ft	0 - 4.6 ft	0 - 5.7 ft	0 - 4 ft
		Sample Type	N	FD	N	N
		Matrix	SE	SE	SE	SE
	X	1267668.28	1267668.28	1267650.75	1267597.9	1267597.9
	Y	212812.47	212812.47	212756.49	212603.43	212603.43
Conventional Parameters (ppt)	Method	RCRA TCLP Metals				
Total Solids	SM2540G	--	59.98	61.37	70.37	66.73
Metals (SW1311) (µg/L)						
Arsenic	SW6010C	5000	250 U	52.4 J	40.4 J	43.3 J
Barium	SW6010C	100000	155 U	375 U	169 U	277 U
Cadmium	SW6010C	1000	10 U	10 U	10 U	10 U
Chromium	SW6010C	5000	25 U	25 U	25 U	8 J
Lead	SW6010C	5000	100 U	100 U	100 U	100 U
Mercury	SW7470A	200	10 U	0.1 U	0.017 J	0.1 U
Selenium	SW6010C	1000	250 U	250 U	250 U	250 U
Silver	SW6010C	5000	3.2 J	15 U	15 U	15 U
Semivolatile Organics (µg/kg)						
1,2,4-Trichlorobenzene	SW8270DSIM	--	5 U	5 U	49.1 U	49.9 U
1,2-Dichlorobenzene	SW8270DSIM	--	5 U	5 U	49.1 U	49.9 U
1,4-Dichlorobenzene	SW8270DSIM	--	5 U	5 U	49.1 U	49.9 U
2,4-Dimethylphenol	SW8270DSIM	--	11.1 J	12.8 J	23.2 J	200 U
2-Methylphenol (o-Cresol)	SW8270DSIM	--	7.3	10.1	49.1 U	49.9 U
4-Methylphenol (p-Cresol)	SW8270DSIM	--	122	120	45.5 J	31.3 J
Benzoic acid	SW8270DSIM	--	147	99.4 U	-- R	-- R
Benzyl alcohol	SW8270DSIM	--	19.9 U	19.9 U	197 U	200 U
bis(2-Ethylhexyl)phthalate	SW8270D	--	54.8	49.7 U	491 U	650
Butylbenzyl phthalate	SW8270D	--	19.9 U	19.9 U	197 UJ	200 UJ
Diethyl phthalate	SW8270DSIM	--	19.9 U	19.9 U	197 UJ	200 UJ
Dimethyl phthalate	SW8270DSIM	--	5 U	5 U	49.1 UJ	49.9 UJ
Di-n-butyl phthalate	SW8270D	--	69.3 U	66.6 U	197 U	200 U
Di-n-octyl phthalate	SW8270D	--	19.9 U	19.9 U	197 U	200 U
Hexachlorobenzene	SW8270DSIM	--	5 U	5 U	49.1 U	49.9 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270DSIM	--	5 U	5 U	49.1 U	49.9 U

IDW Results

n-Nitrosodiphenylamine	SW8270DSIM	--	5 U	5 U	49.1 U	49.9 U
Pentachlorophenol	SW8270DSIM	--	50.6	19.9 U	197 U	200 U
Phenol	SW8270DSIM	--	19.5	13.8	69.1	114
Polycyclic Aromatic Hydrocarbons (µg/kg)						
2-Methylnaphthalene	SW8270D	--	142	102	452 J	230
Acenaphthene	SW8270D	--	279	192	861 J	269
Acenaphthylene	SW8270D	--	217	77.2	80.1 J	270
Anthracene	SW8270D	--	877	388	1830 J	971
Benzo(a)anthracene	SW8270D	--		588	3070	2290
Benzo(a)pyrene	SW8270D	--		544	3260	2050
Benzo(b,j,k)fluoranthenes	SW8270D	--		998	4870	4550
Benzo(g,h,i)perylene	SW8270D	--	1140	205	2690	1300
Chrysene	SW8270D	--		837	3650	3580
Dibenzo(a,h)anthracene	SW8270DSIM	--	476	64.6	727 J	397
Dibenzofuran	SW8270D	--	195	117	634 J	192 J
Fluoranthene	SW8270D	--		1360	7740 J	10700 J
Fluorene	SW8270D	--	319	193	1720 J	697 J
Indeno(1,2,3-c,d)pyrene	SW8270D	--	1170	199	2170	1180
Naphthalene	SW8270D	--	332	470	1230 J	533
Phenanthrene	SW8270D	--		1110	9740	3960
Pyrene	SW8270D	--	7950	3160	8650 J	10300 J
Total Benzofluoranthenes (b,j,k) (U = 0)	--	--	--	998	4870	4550
Total HPAH (SMS) (U = 0)	--	--	10736	7955.6	36827 J	36347 J
Total LPAH (SMS) (U = 0)	--	--	2024	2430.2	15461.1 J	6700 J
PCB Aroclors (µg/kg)						
Aroclor 1016	SW8082A	--	7.9 U	7.7 U	19.7 U	39.4 U
Aroclor 1221	SW8082A	--	7.9 U	7.7 U	19.7 U	39.4 U
Aroclor 1232	SW8082A	--	7.9 U	7.7 U	19.7 U	39.4 U
Aroclor 1242	SW8082A	--	7.9 U	7.7 U	19.7 U	39.4 U
Aroclor 1248	SW8082A	--	7.9 U	7.7 U	60.2	266
Aroclor 1254	SW8082A	--	11.4	12.7	243	598
Aroclor 1260	SW8082A	--	17.8 J	44.1	229	523
Aroclor 1262	SW8082A	--	7.9 U	7.7 U	19.7 U	39.4 U
Aroclor 1268	SW8082A	--	7.9 U	7.7 U	19.7 U	39.4 U
Total PCB Aroclors (SMS Marine 2013) (U = 0)	--	--	29.2 J	56.8	532.2	1387
Total Petroleum Hydrocarbons (mg/kg)						
Diesel range hydrocarbons	NWTPHDx	--		--	221	554

IDW Results

Motor oil range hydrocarbons	NWTPHDx	--	--	--	345	1120
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Notes:

-  Detected concentration is greater than RCRA TCLP Metals screening level
-  Non-detected concentration is above one or more identified screening levels

Bold : Detected result

J: Estimated value

U: Compound analyzed, but not detected above detection limit

UJ: Compound analyzed, but not detected above estimated detection limit

R: Rejected

Physical Test Results

Task	T25_SedChar2019	T25_SedChar2019	T25_SedChar2019	T25_SedChar2019	T25_SedChar2019	T25_SedChar2019	T25_SedChar2019
Location ID	T25-SC02	T25-SC04	T25-SC04	T25-SC04	T25-SC05	T25-SC-05	T25-SC-06
Sample ID	T25-SC02-4.6-5.6	T25-SC04-2-3	T25-SC04-4-5	T25-SC04-5-5.6	T25-SC05-0-1	T25-SC05-0-1	T25-SC06-0-1
Sample Date	3/25/2019	3/24/2019	3/24/2019	3/24/2019	3/26/2019	3/26/2019	3/26/2019
Depth	4.6 - 5.6 ft	2 - 3 ft	4 - 5 ft	5 - 5.6 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft
Sample Type	N	N	N	N	N	N	N
Matrix	SE	SE	SE	SE	SE	SE	SE
X	1267668.28	1267597.9	1267597.9	1267597.9	1267419.4	1267525.53	
Y	212812.47	212603.43	212603.43	212603.43	212412.09	212519.45	
Method							
Conventional Parameters (unitless)							
Specific gravity	D854	--	2.57	--	2.65	--	--
Conventional Parameters (pct)							
Moisture (water) content	D2216	--	47.9	--	39.8	--	--
Total Solids	SM2540G	74.94	--	69.91	--	61.65	70.08
Grain Size (pct)							
Gravel	D422	1.7	5.9	22.9	0.6	4.6	7.2
Sand	D422	88.2	83.7	70.2	95.2	70.3	76.7
Silt	D422	8.3	9.6	5.4	4.3	21.4	13.8
Clay	D422	0.8	0.8	1.2	0.1 U	1.8	0.1 U

Notes:

Bold: Detected result

--: results not reported or not applicable

FD: field duplicate sample

ft: feet

N: normal environmental sample

pct: percent

SE: sediment matrix

U: compound analyzed, but not detected above detection limit

Horizontal coordinate datum is NAD 1983 State Plane Washington North FIPS 4601 (US Survey Feet).

All nondetect results are reported at the reporting limit.

USEPA Stage 2B data validation was completed by Laboratory Data Consultants (LDC).

Physical Test Results

T25_SedChar2019 T25-SC-06 T25-SC56-0-1 3/26/2019 0 - 1 ft FD SE 1267525.53 212519.45	T25_SedChar2019 T25-SC07 T25-SC07-0-1 3/25/2019 0 - 1 ft N SE 1267571.79 212704.13	T25_SedChar2019 T25-SC07 T25-SC07-1-2 3/25/2019 1 - 2 ft N SE 1267571.79 212704.13	T25_SedChar2019 T25-SC08 T25-SC08-0-1 3/25/2019 0 - 1 ft N SE 1267624.89 212881.97	T25_SedChar2019 T25-SC-09B T25-SC09B-0-1 3/26/2019 0 - 1 ft N SE 1267749.02 212873.88	T25_SedChar2019 T25-SC-09B T25-SC09B-2-3 3/26/2019 2 - 3 ft N SE 1267749.02 212873.88
--	--	2.46	--	--	2.36
--	--	118.4	--	--	128.6
--	48.94	--	42	24.26	43.22
2.7	0.1	2.3	1.7	1	0.8
80.5	24.3	36.4	31.9	7.9	13.6
15.2	65	55.7	59.3	78.8	79.1
0.1 U	3.6	0.1 U	1.4	1	2.2